

# I-75 / LAPLAISANCE ROAD INTERCHANGE RECONSTRUCTION




# PROJECT OVERVIEW

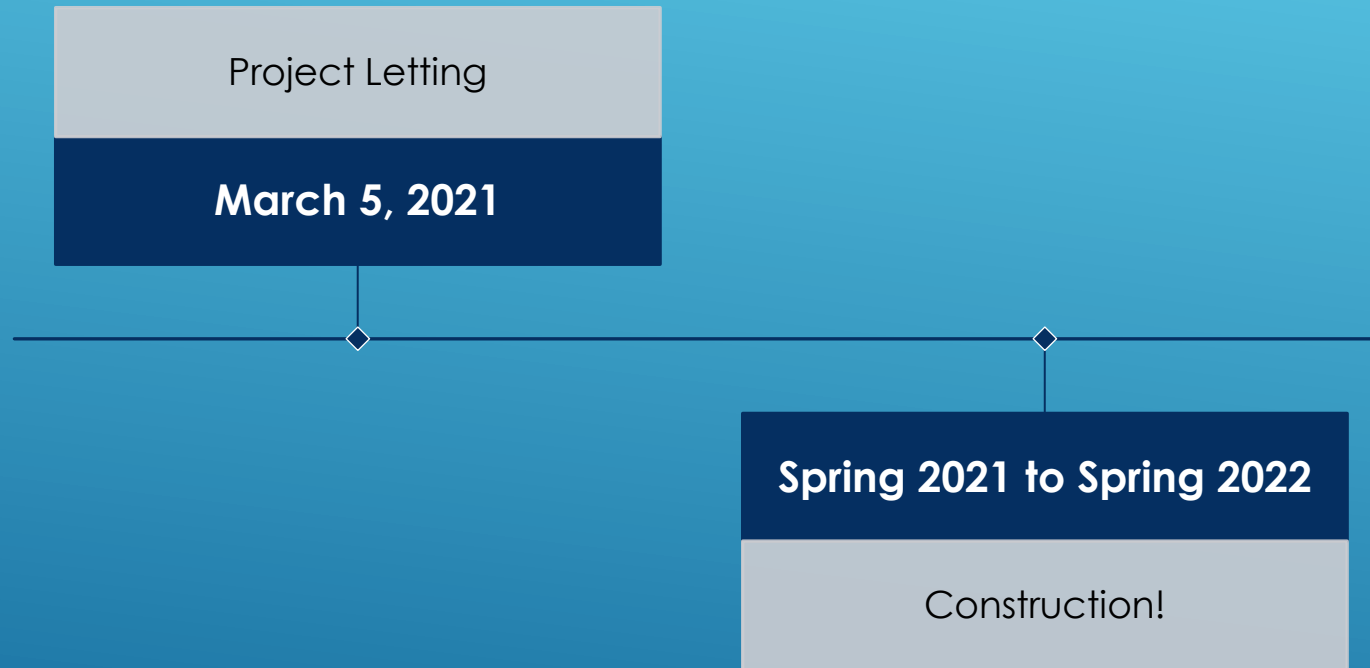
# PROJECT LIMITS

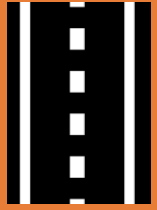


# PROJECT DETAILS

- ▶ Interchange study completed to determine best alternative for design and construction
  - ▶ Structure study approval from Federal Highway
  - ▶ Reconstruction of LaPlaisance bridge over I-75
  - ▶ Reconstruction of LaPlaisance Road interchange
  - ▶ Reconstruction of LaPlaisance Road
  - ▶ Reconfiguration of interchange
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# PROJECT TIMELINE





## Bridge and pavement condition

- LaPlaisance Rd bridge over I-75 and LaPlaisance Road constructed in 1955
- LaPlaisance Rd interchange ramps reconstructed in 1974



## Interchange Modernization

- 25-year (2045) traffic projections
- Reconfiguration of interchange
- Shorter bridge to reduce upfront and future maintenance costs

# PROJECT NEED

# SPECIFIC PROJECT INFORMATION (INTERCHANGE RECONFIGURATION)



# LaPlaisance Road over I-75 (existing condition)



- ▶ Bridge currently closed to traffic
- ▶ Requires replacement due to current condition
- ▶ Existing 14 ft-3 inch (SB) minimum posted underclearance





# LaPlaisance Road and Ramps



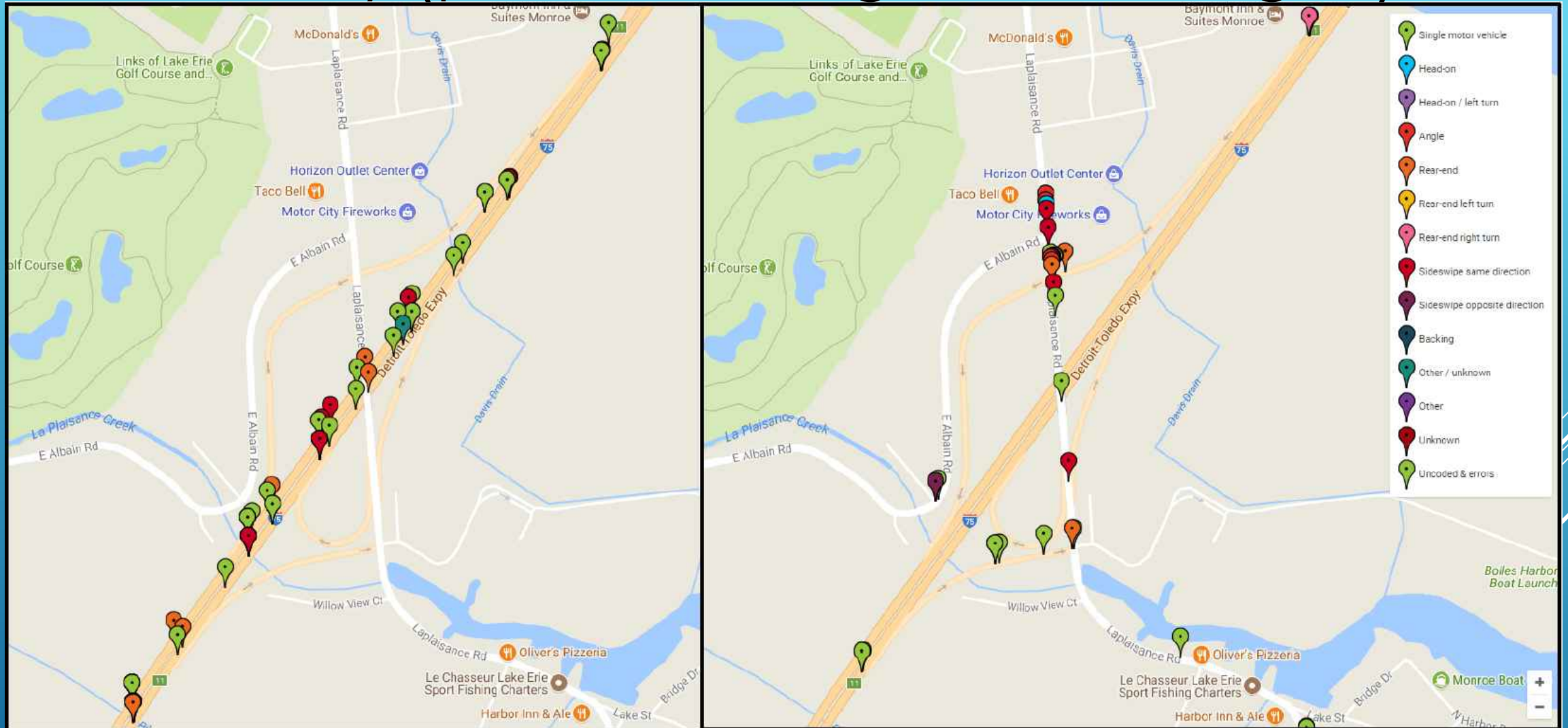




► The existing interchange operates at an acceptable Level of Service (LOS)

LOS is a term used to describe the operating conditions of a roadway based on speed, travel time, maneuverability, delay and safety

# Crash History (potential mitigation strategies)



- Improved physical pavement condition
- Operational improvement of ramp terminals (specifically SB exit ramp)

# PROJECT BENEFITS - WHY REPLACE THE BRIDGE AND RECONFIGURE THE INTERCHANGE?



PROMOTE BETTER TRAFFIC  
FLOW AND VEHICULAR  
SAFETY



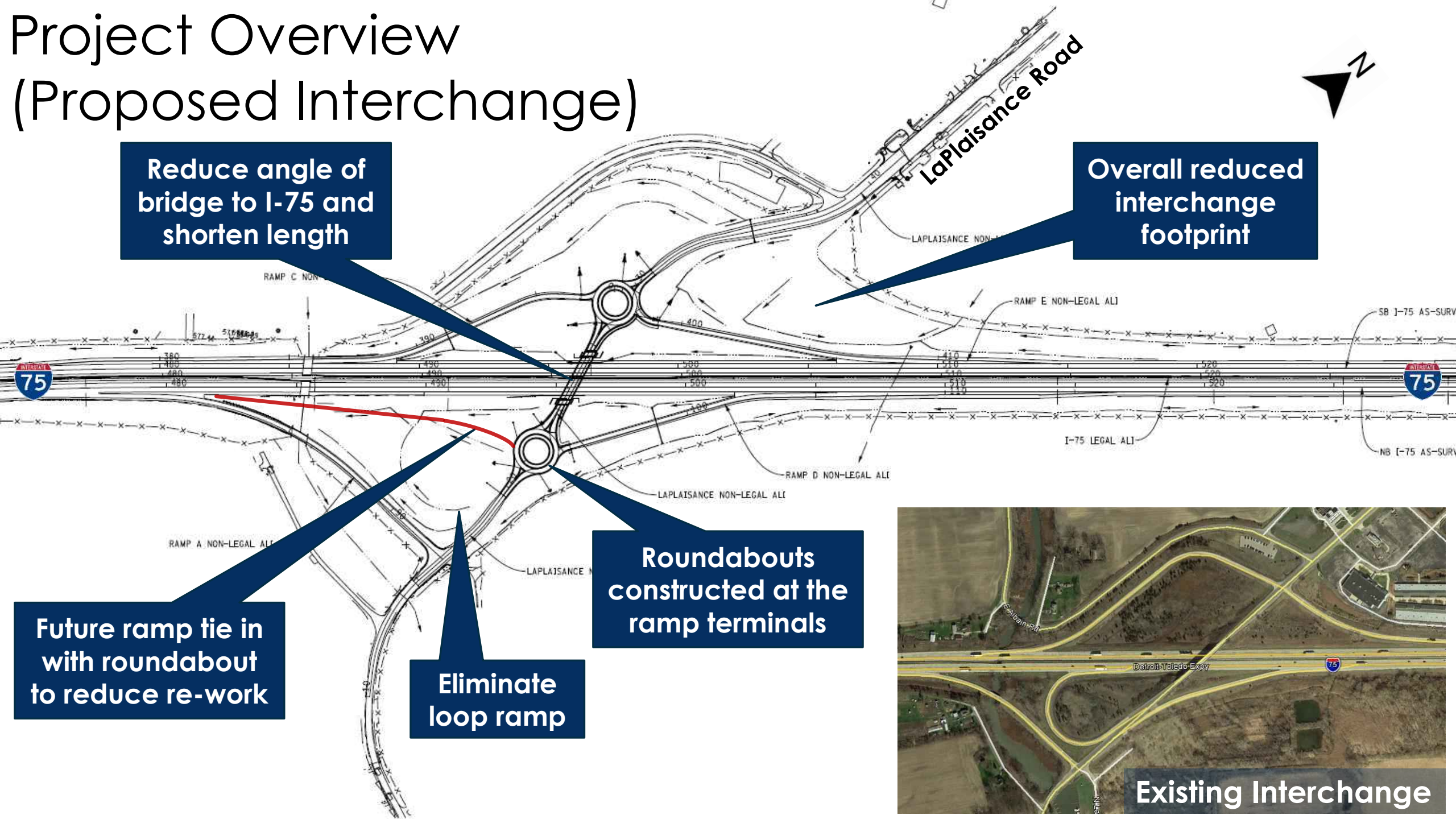
CONSTRUCTED WITH  
FUTURE PEDESTRIAN  
CROSSING SAFETY IN MIND



BUILD AND MAINTAIN  
ONLY WHAT IS NEEDED




# Project Overview (Proposed Interchange)



Existing Interchange

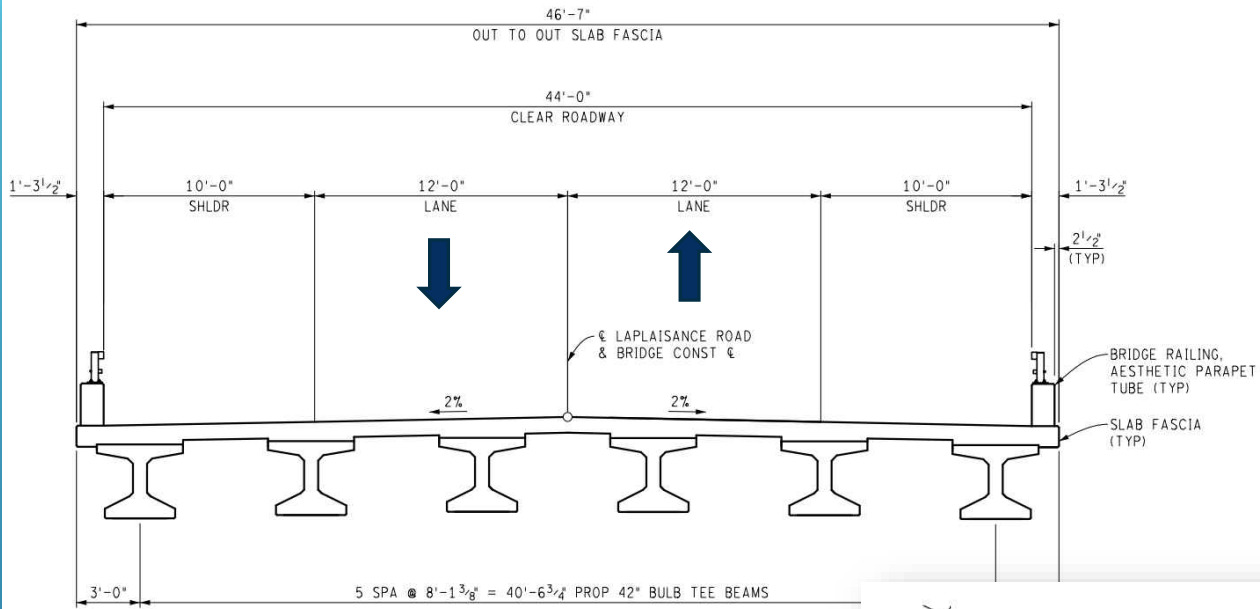
# Project Overview

## ► Additional advantages to the roundabout configuration:

- ✓ With stop condition at the terminals, the NB I-75 exit ramp operates at a LOS F (roundabouts give the ability to keep traffic moving)
  - ✓ Reduced future maintenance costs for the LaPlaisance bridge over I-75
  - ✓ Eliminates NB I-75 exit ramp bridge over LaPlaisance Creek in the future
  - ✓ Limited space available to upgrade geometrics in current configuration
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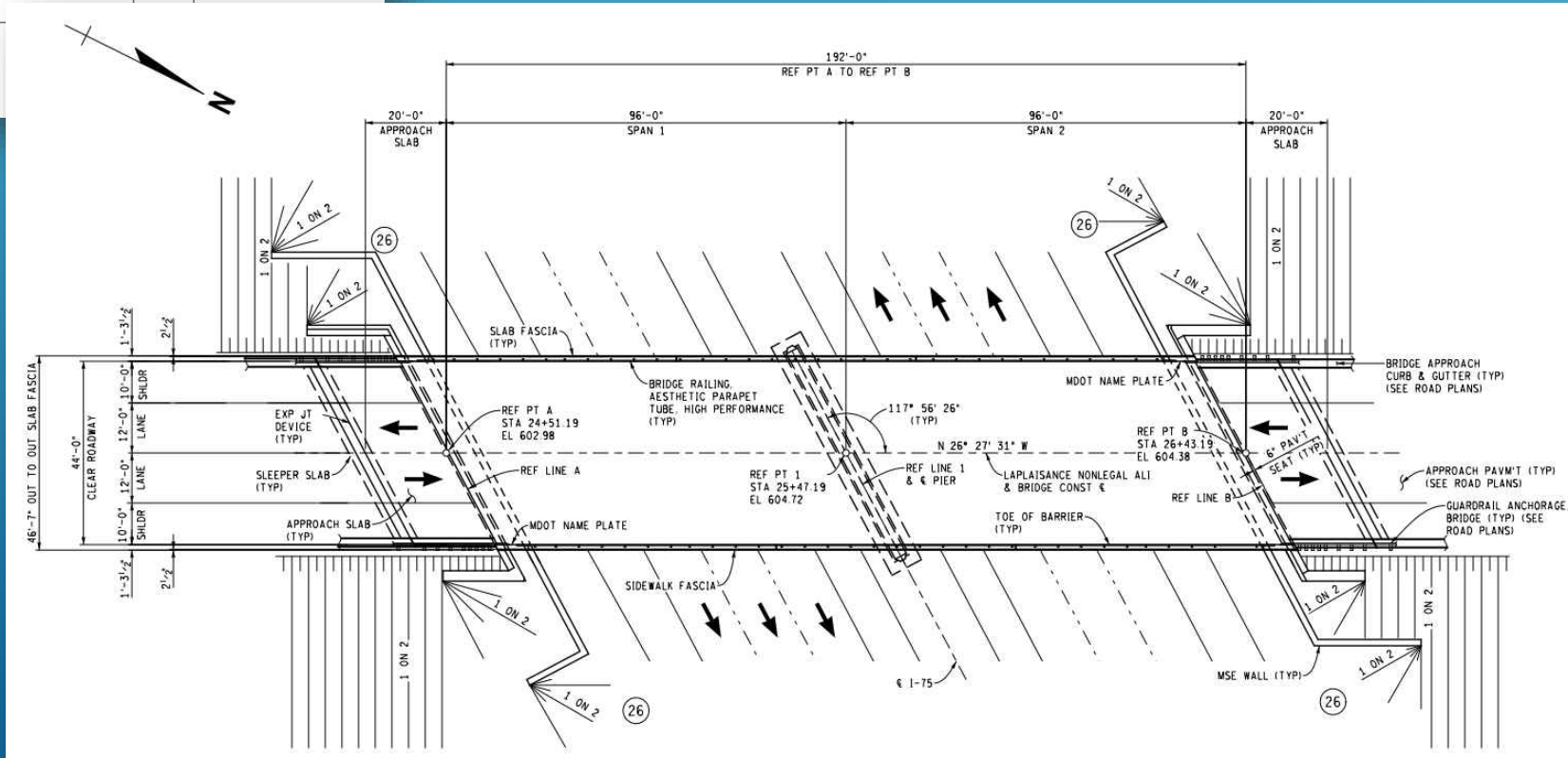



# Proposed LaPlaisance Road Bridge over I-75



TYPICAL DECK SECTION

(OPTION 1)





► The proposed interchange operates at an acceptable Level of Service through design year 2045

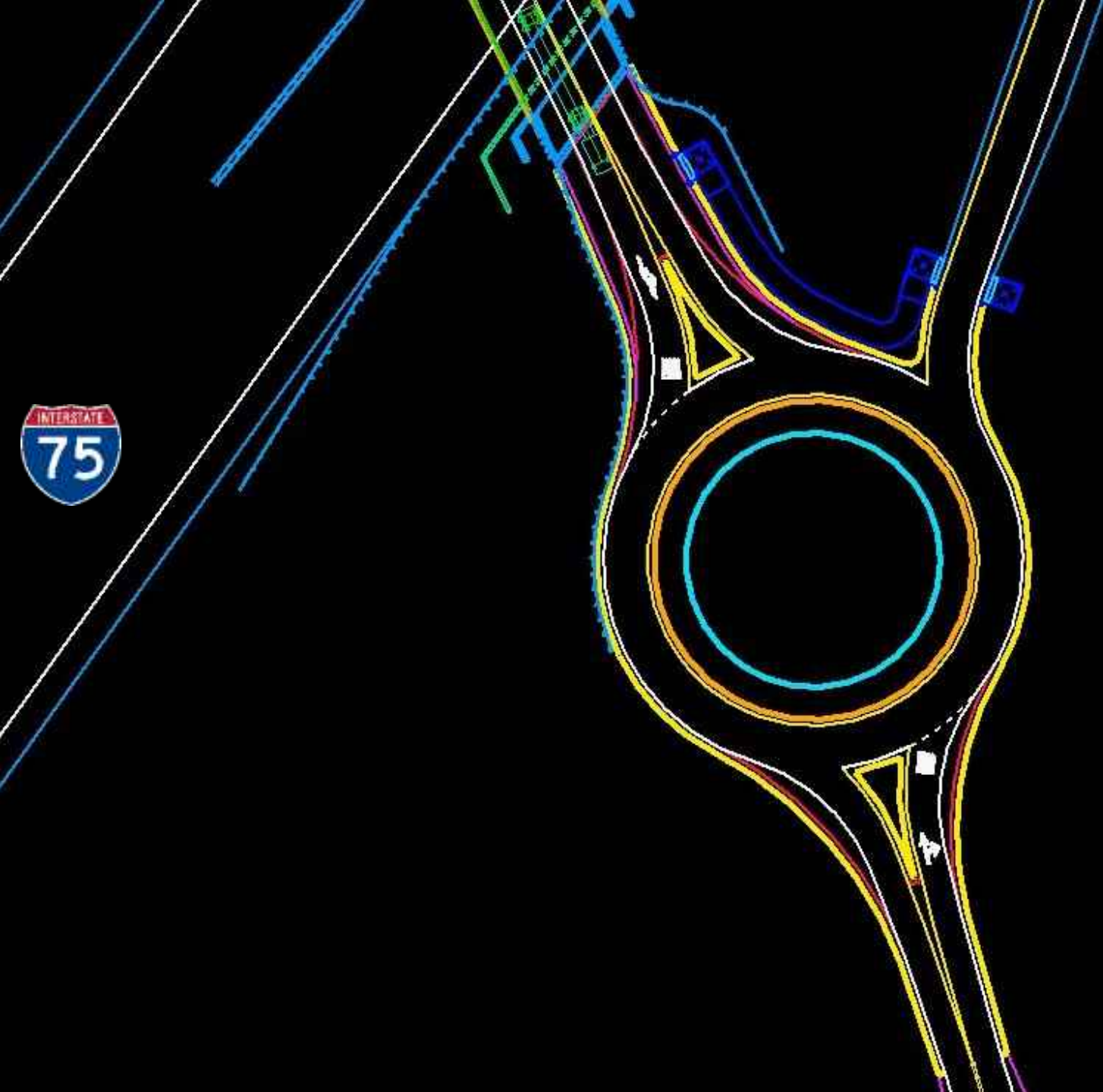


# Project Overview (NB Roundabout)



- ▶ Truck apron design and constructed to be driven on

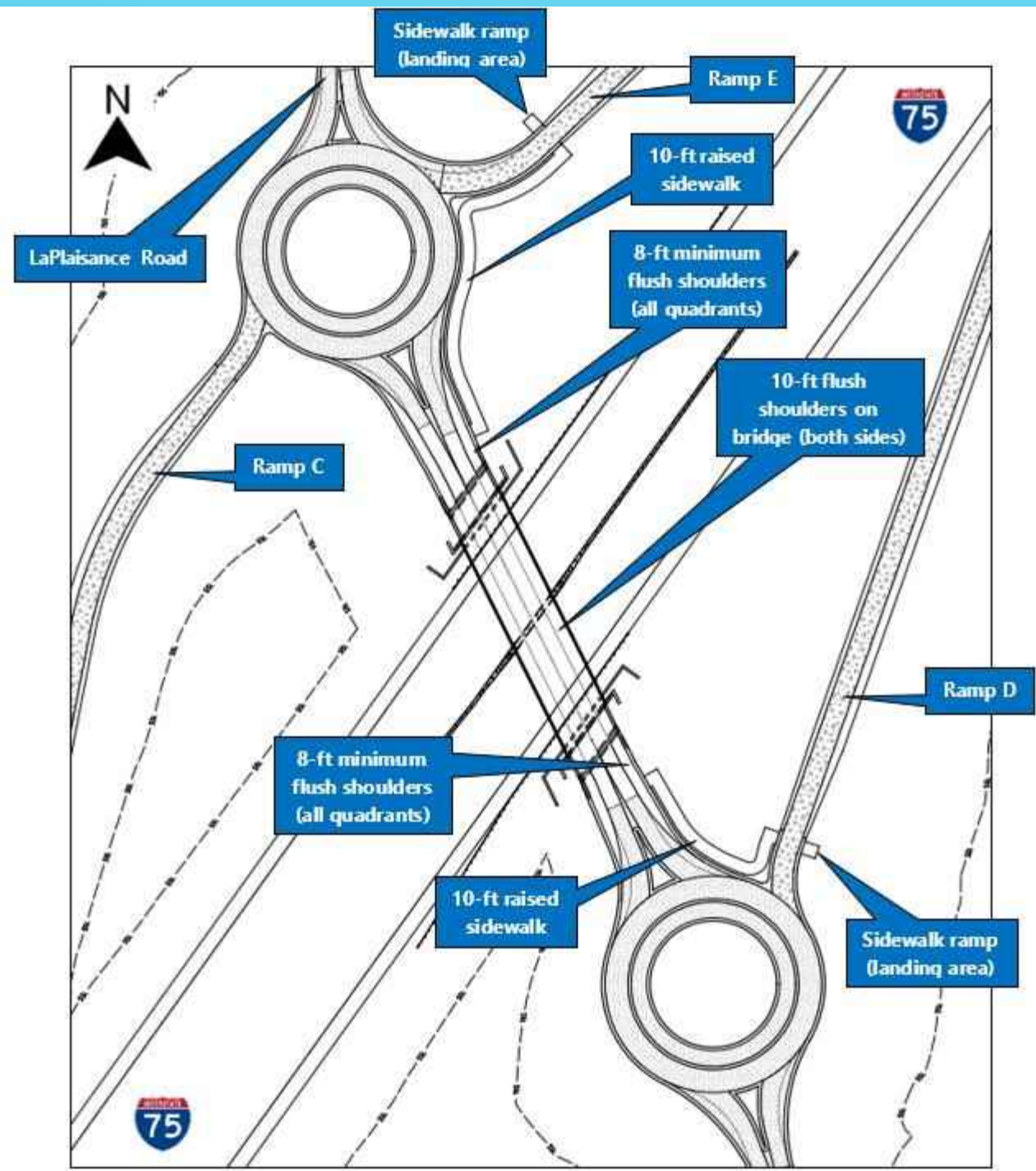
# Project Overview (SB Roundabout)



# OTHER FEATURES



# PEDESTRIAN IMPROVEMENTS





# MAINTAINING TRAFFIC

# CONSTRUCTION STAGE 1 (2021)

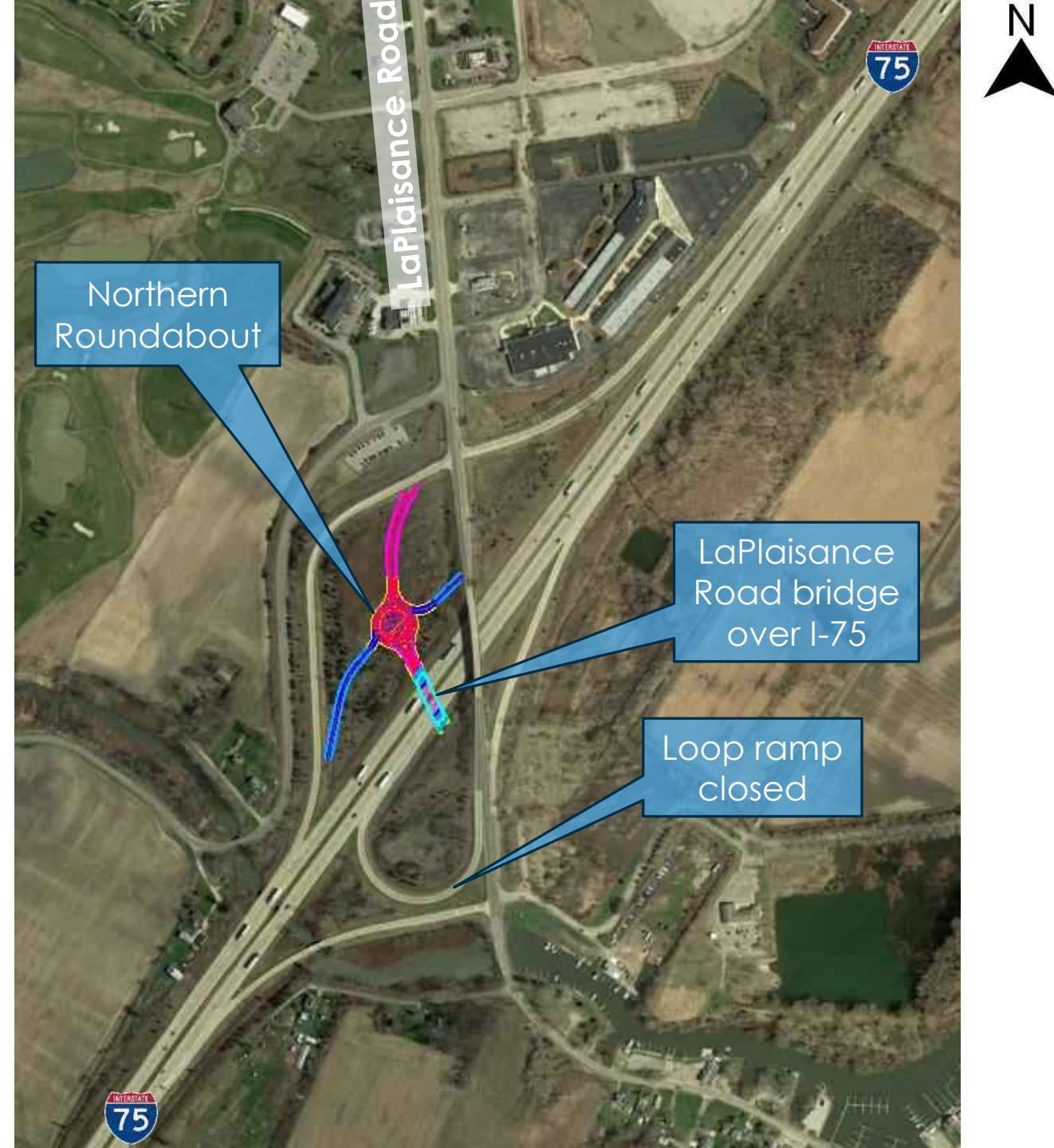
This project is proposed to be built in 4 construction stages

## Construction:

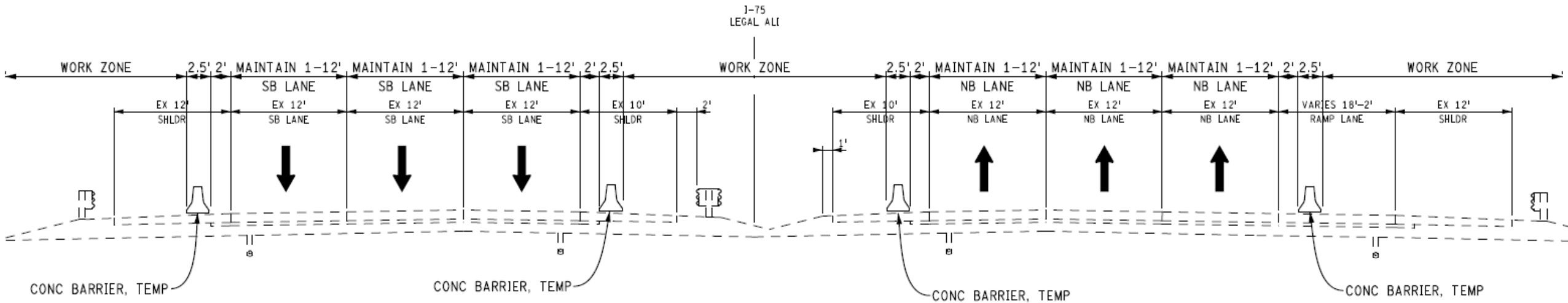
- ✓ New LaPlaisance Bridge over I-75
- ✓ Northern roundabout
- ✓ Miscellaneous ramp and LaPlaisance road work

## Traffic:

- ✓ All lanes open on I-75
- ✓ All ramps open, except the loop ramp
- ✓ One NB lane open on LaPlaisance Road



# CONSTRUCTION (2021)



Construction: LaPlaisance Bridge over I-75

Traffic: All lanes open on I-75. Shoulders closed.



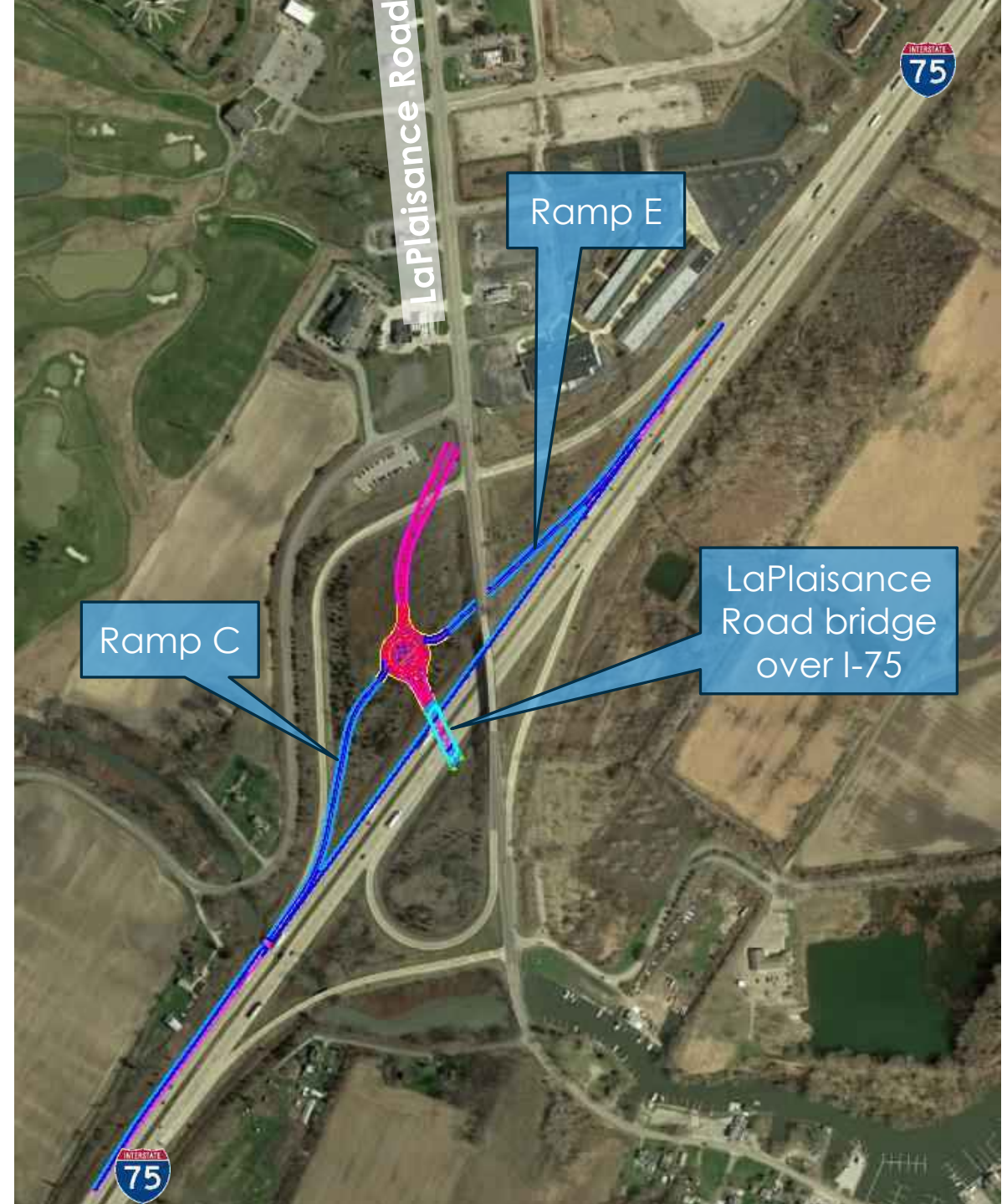
# CONSTRUCTION STAGE 2 (2021)

## Construction:

- ✓ Ramps C and E
- ✓ LaPlaisance Road
- ✓ Continue bridge work

## Traffic:

- ✓ I-75 traffic shifted to accommodate ramp and bridge work
- ✓ Ramp C closed (detoured via Otter Creek interchange)
- ✓ One NB lane open on LaPlaisance Road



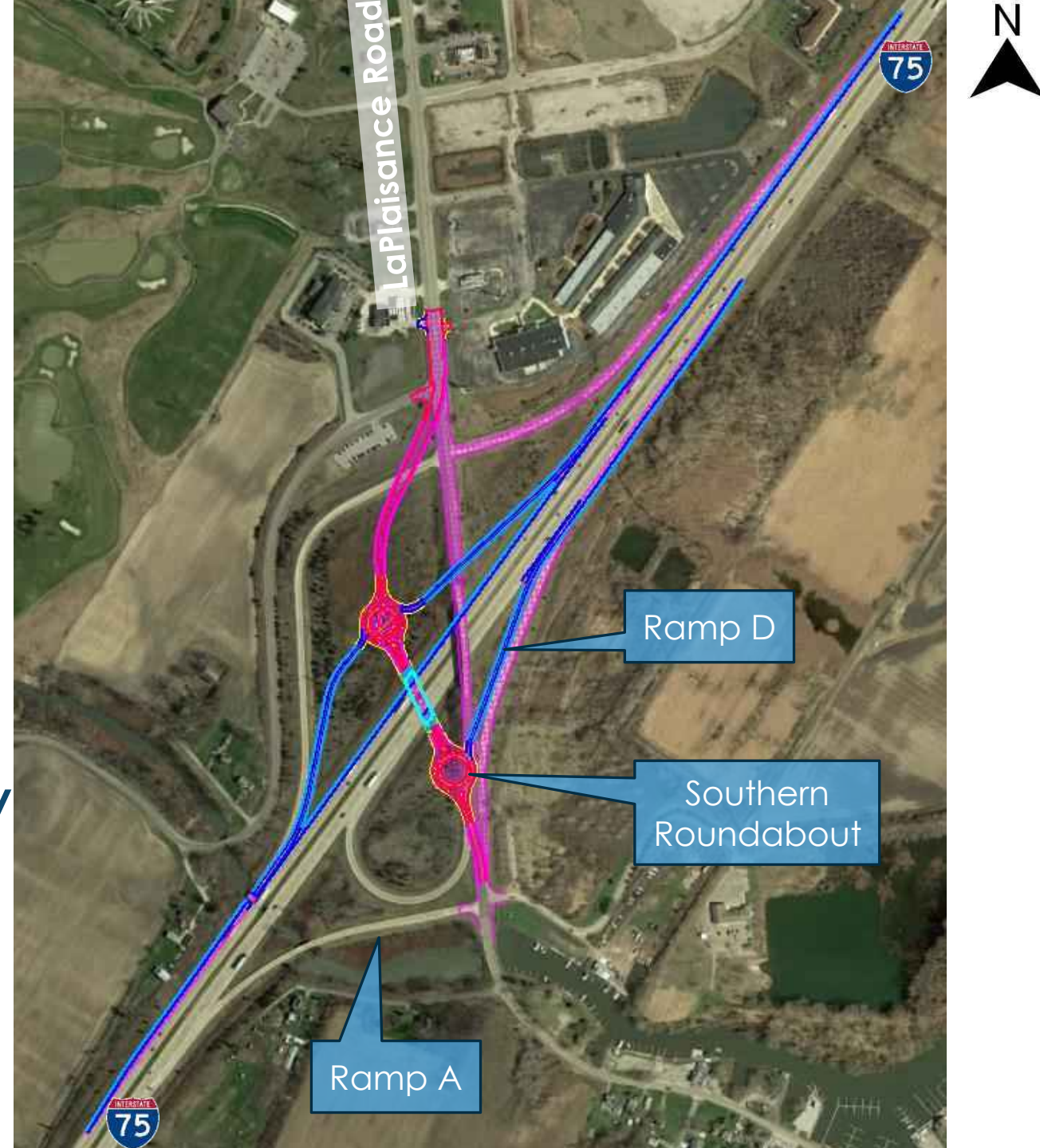
# CONSTRUCTION STAGE 3 (2021)

## Construction:

- ✓ Ramp D
- ✓ Southern roundabout
- ✓ Work along NB I-75 and finish bridge

## Traffic:

- ✓ I-75 traffic remains shifted
- ✓ Close and detour LaPlaisance Road
- ✓ All ramps closed, except Ramp A, SB only
- ✓ Ramp E traffic detoured via Otter Creek interchange
- ✓ Ramp D traffic detoured via Front Street interchange





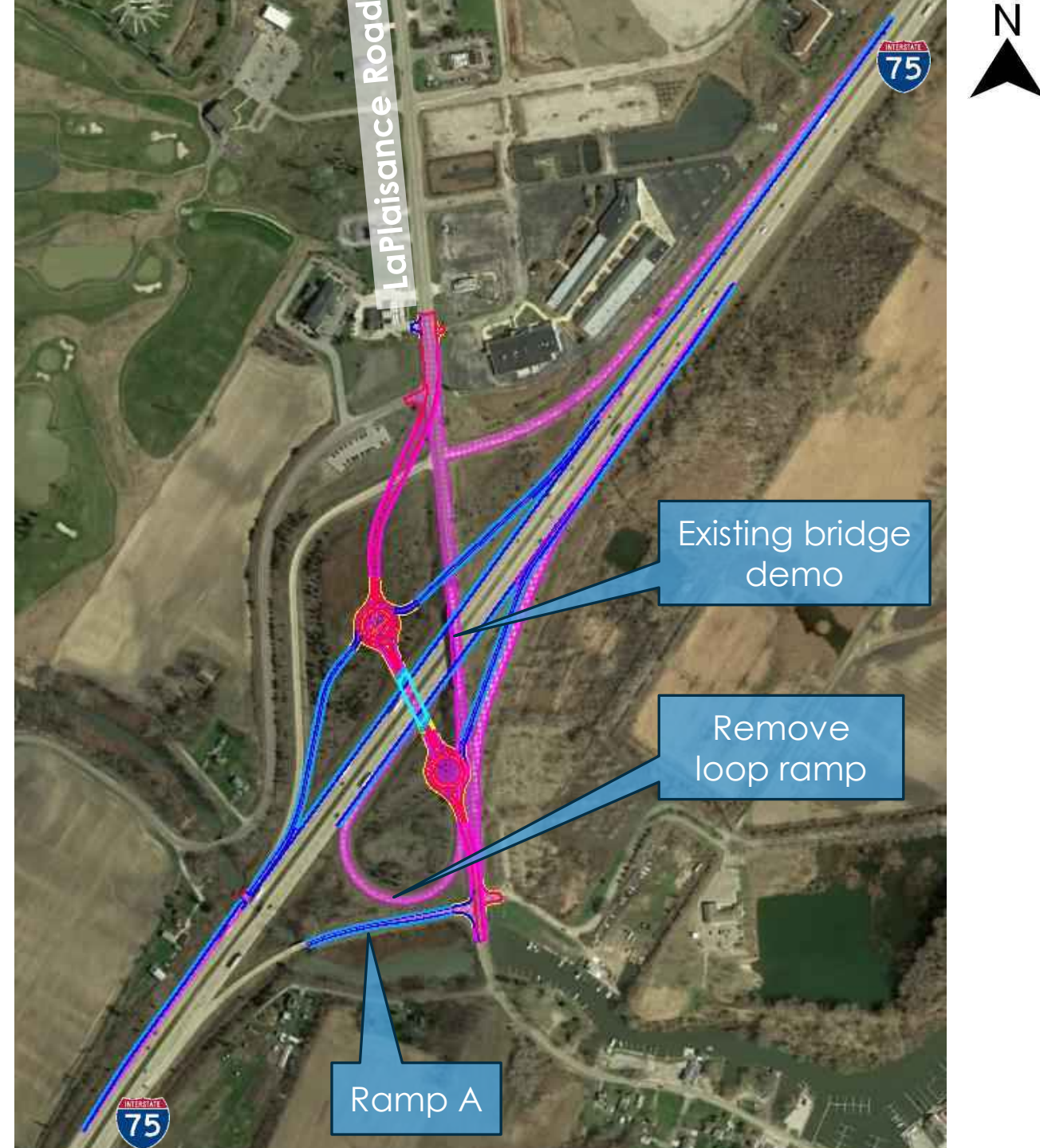
# CONSTRUCTION STAGE 4 (2021)

## Construction:

- ✓ Continue construction of LaPlaisance Rd
- ✓ Construct Ramp A
- ✓ Remove loop ramp
- ✓ Remove the existing bridge over I-75

## Traffic:

- ✓ I-75 traffic remains shifted
- ✓ LaPlaisance Road remains closed
- ✓ All ramps closed and detoured
- ✓ Ramp A traffic detoured via Otter Creek Interchange





# CONTACT AND FEEDBACK

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